(11)Publication number :

10-324702

(43)Date of publication of application: 08.12.1998

(51)Int.CI.

C08B 37/10 A61K 31/725 A61L 33/00 C08F 12/22 C08F 16/14 C08F 18/04 C08F 26/00 C08F 28/00 C08F246/00

(21)Application number: 10-134023

(71)Applicant: HUELS AG

(22)Date of filing:

15.05.1998

(72)Inventor: WULFF GUENTER

ANDERS CHRISTINE DR BELLMANN SUSANNE

BROCK ACHIM

(30)Priority

Priority number: 97 19720369

98 19801040

Priority date: 15.05.1997

Priority country: DE

14.01.1998

DE

(54) HEPARINOID HOMPOLYMER OR COPOLYMER, AND ITS PRODUCTION AND USE (57)Abstract:

PROBLEM TO BE SOLVED: To obtain the subject new compound useful for medical products, e.g. cardiac valves, catheters, autoscopes, drainage tubes, which are in contact with the blood. SOLUTION: This compound is a heparinoid homopolymer or copolymer having a repetition unit shown by formula I (R1 is H or methyl; R2 is a crosslinking element; and A is sulfated polyol, polyamine, (poly)amine(poly)ol or the like), preferably a repetition unit shown by formula II (R3 is O or NH; R4 is H or SO3-Na+, at least one of R4's being SO3-Na+; and (n) is 4 or 5), e.g. O-sulfated-1-hydroxy-1desoxy-1-(4-vinylphenyl)-D-gluco(C-manno)pentitol. The monomer shown by formula II is obtained by acetalizing the hydroxy group in, e.g. D-glucono-1,5-lactone, converting the resultant (cyclo)lactoned into the (open-chain)methyl ester by the aid of methanol, reducing the resultant isomer mixture,

cleaving the carbon chain by the aid of an oxidant,

and introducing vinyl functional group by the Grignard reaction.

LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2000 Japan Patent Office